

REMARKS

Claims 1-3, 5-8, 11, 12, 14-16, 18 and 19 are pending in this application. By this Amendment, claims 1, 3, 5 and 8 are amended and claims 4, 9, 10, 13 and 17 are cancelled. No new matter is added.

I. Claim Rejection Under 35 U.S.C. §112

The Office Action rejects claims 3, 6, and 11-14 under 35 U.S.C. 112, second paragraph as indefinite. Applicant respectfully traverses the rejection.

Claims 3 and 8 are rejected for reciting "small" and "large", which the Office Action alleges are not sufficiently definite that one of ordinary skill in the art would know the "scope the invention." Without agreeing with the propriety of the rejection, by this Amendment, the claims are amended to overcome the rejection. Applicant requests withdrawal of the rejection.

Claims 6, 11 and 12 are rejected because the term "said base portion" lacks antecedent basis. By this Amendment, claim 1 is amended to recite a base portion for each segment, rendering the rejection moot. Applicant requests withdrawal of the rejection.

Claims 13 and 14 are rejected, the Office Action alleging that it is unclear how the "connection means" relates to the "positioning/assembling portions" of claim 4. The positioning/assembling portions are disclosed at, for example, paragraph [0021] of the specification as filed and the connecting means are disclosed at, for example, paragraph [0025] of the specification as filed. As disclosed, the side portions and base portion of each segment can be connected by either, or both, of the claimed connection means and the claimed positioning/assembling means. Thus, these features are separate and supported. Applicant requests withdrawal of the rejection.

II. The Claims Are Patentable Over The Applied References

The Office Action (1) rejects claims 1-3 and 8 under 35 U.S.C. 102(b) over Japanese Patent Publication No. 07-125506 to Tanigawa et al. (Tanigawa); (2) rejects claims 1-4, 6-13, 15-17 and 19 under 35 U.S.C 102(b) over U.S. Patent No. 4,116,596 to Pizzorno; (3) rejects claims 1-2, 4-7, 9, 11, 13-15 and 17-19 under 35 U.S.C. 102(b) over U.S. Patent No. 1,366,750 to Smith et al. (Smith); and (4) rejects claims 3, 8, 10, 12 and 16 under 35 U.S.C. 103(a) over Smith. Applicant respectfully traverses the rejections.

By this Amendment, independent claim 1 is amended to include the features of prior claim 4. Thus, claim 1 provides that each segment comprises a base portion integrally arranged on an inner side of the center portion, and the side portions and base portion of each segment are provided with positioning/assembling portions for the side portions, respectively.

This provides the benefit that, for each segment, it is possible to perform a predetermined positioning of the center portion and the side portions in a positive and facilitated manner; and that it is possible to perform positioning, when the segments have been assembled, of the side portions with a predetermined accuracy both in the circumferential direction and in the axial direction, as discussed in, for example, paragraph [0013] of the specification as filed.

Regarding rejection (1), the rejection is moot as claim 1 now recites the features of prior claim 4, not rejected over Tanigawa.

Regarding rejection (2), Pizzorno fails to disclose (1) "said center portion and said side portions of each segment being detachably connectable to each other" and (2) "the positioning/assembling portions configured such that the side portions and center portion of each segment can be detached from each other while still within the tire after the tire has been vulcanized."

Pizzorno discloses a ridged core having sectors 1 (small) and 2 (large) (Figure 1). In cross-section, the sectors 1 and 2 have central part 5 and lateral sickle shaped parts 6 and 7 (Figure 3). Central part 5 has shaft 9 on which hinged arms 15, fixed to sickle shaped parts 6 and 7, pivot (Figs. 2-3; col. 2, lines 47-59). Thus, for each segment, central part 5 and sickle shaped parts 6 and 7 are not detachable. The sectors 1 and 2 are held together by rings 4 (Figures 2 and 3).

Pizzorno fails to disclose both of features (1) and (2) above because Pizzorno's central part 5 and sickle shaped parts 6 and 7 are not detachable.

Regarding rejection (3), Smith fails to disclose "the positioning/assembling portions configured such that the side portions and center portion of each segment can be detached from each other while still within the tire after the tire has been vulcanized."

Smith discloses a core having three sections A (large) and key section B (small) (Figure 1). In the embodiment of Figure 8, in cross-section, the segments A and B comprise thread portion 18 and side plates 21. Rings 24 are used to hold the segments A and B together (Fig. 8).

Smith fails to disclose the feature that the side portions and center portion of each segment can be detached while still within the tire because screws 21' can only be removed by access from the sides which is impossible when the assembly is still within the tire.

Regarding rejection (4), these claims are patentable over Smith for at least the same reasons as claim 1.

For the forgoing reasons, Applicant requests withdrawal of the rejections.

III. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

Jonathan H. Backenstose
Registration No. 47,399

JAO:JHB/cxt

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OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

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